

Claims

1. Sensor (10) for detecting fog-like media, comprising at least two transmitters (18, 20) and at least one receiver (22), wherein the transmitter axes (28, 30) intersect the receiver axis (32) at two different positions (P₁, P₂), and with an evaluation unit (32) which detects the medium when the receiver (22) receives signals transmitted by both transmitters (18, 20).
2. Sensor (50) for detecting fog-like media, comprising at least one transmitter (52) and at least two receivers (60, 62), wherein the transmitter axis (54) intersects the receiver axes (56, 58) at two different positions (P₁, P₂), and with an evaluation unit (32) for detecting the medium when the two receivers (60, 62) receive signals transmitted by the transmitter (52).
3. Sensor (10, 50) according to claim 1 or 2, characterized in that the sensor comprises an optics (24) which focuses each signal to be transmitted or received in a respective, preferably largely cylindrical or linear, beam along the respective transmitter (28, 30, 54) or receiver axis (32, 56, 58).
4. Sensor (10, 50) according to claim 1, 2 or 3, characterized in that the at least two transmitter axes (28, 30) or the two receiver axes (56, 58) do not intersect and/or at least extend largely parallel to each other.
5. Sensor (10, 50) according to any one of the preceding claims, characterized in that the evaluation unit (32) is adapted to determine the density of the medium on the basis of a comparison of

the intensity of the signals transmitted to the intensity of the signals received.

6. Sensor (10, 50) according to any one of the preceding claims, characterized in that the at least one transmitter (18, 20, 52) is an infrared transmitter and the at least one receiver (22, 60, 62) is an infrared receiver.
7. Sensor (10, 50) according to any one of the preceding claims, characterized in that the sensor (10, 50) is adapted for mounting to a window (14), in particular to the windshield of a vehicle.
8. Sensor (10, 50) according to claim 7, characterized in that a coupling means (26) is provided between the optics (24) and the window (14).
9. Sensor (10, 50) according to any one of the preceding claims, characterized in that the at least one transmitter (18, 20, 52) and/or the at least one receiver (22, 60, 62) is/are disposed on a circuit board (16).
10. Sensor (10, 50) according to any one of the preceding claims, characterized in that the sensor (10, 50) generates a signal for controlling a system, for detecting fog-like media.
11. Method for detecting fog-like media, characterized in that signals are transmitted by at least two transmitters (18, 20), wherein a receiver axis (32) of a receiver (22) intersects the two transmitter axis (28, 30) at different positions (P_1, P_2) and the medium is subsequently detected when the receiver (22) receives signals transmitted by both transmitters (18, 20).

12. Method for detecting fog-like media, characterized in that signals are transmitted by at least one transmitter (52), wherein at least two receiver axes (56, 58) of two respective receivers (60, 62) intersect the transmitter axis (54) at different positions (P_{10}, P_{20}), and the medium is subsequently detected when the receivers (60, 62) receive signals transmitted by the transmitter (52).
13. Method according to claim 11 or 12, characterized in that the density of the medium is determined on the basis of a comparison between the intensity of the transmitted signals and of the intensity of the received signals.
14. Method according to claim 11, 12, or 13, characterized in that the transmitter (52) or the transmitters (18, 20) transmit signals with a time delay and/or alternatingly.
15. Method according to any one of the claims 11 through 14, characterized in that the signals are infrared signals.
16. Method according to any one of the claims 11 through 15, characterized in that a signal is issued when the medium is detected.